

Exhibit F-

Part 1

PUBLIC VERSION

**UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C.**

In the Matter of

**CERTAIN COMPUTERS AND COMPUTER
PERIPHERAL DEVICES, AND COMPONENTS
THEREOF, AND PRODUCTS CONTAINING
SAME**

Investigation No. 337-TA-841

COMMISSION OPINION

I. INTRODUCTION

The Commission instituted this investigation on May 2, 2012, based on a complaint filed by Technology Properties Limited, LLC (“TPL”) of Cupertino, California. *77 Fed. Reg.* 26041 (May 2, 2012). The complaint alleged violations of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, by reason of infringement of certain claims of U.S. Patent Nos. 6,976,623 (“the ’623 patent”), 7,162,549 (“the ’549 patent”), 7,295,443 (“the ’443 patent”), 7,522,424 (“the ’424 patent”), 6,438,638 (“the ’638 patent”), and 7,719,847 (“the ’847 patent”). The complaint further alleged the existence of a domestic industry. The notice of investigation named twenty-one respondents, some of whom have since settled from the investigation. As a result of these settlements, the ’638 patent is no longer at issue, as it has not been asserted against the remaining respondents. The Office of Unfair Import Investigations did not participate in this investigation.

On October 4, 2012, the presiding Administrative Law Judge (“ALJ”) issued a *Markman* order construing disputed claim terms of the asserted patents. Order No. 23. On January 7-11, 2013, the ALJ conducted a hearing, and on August 2, 2013, the ALJ issued his

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final Initial Determination (“the ID”). The ALJ found that TPL demonstrated the existence of a domestic industry, as required by 19 U.S.C. § 1337(a)(2), through TPL’s licensing investments under 19 U.S.C. § 1337(a)(3)(C). ID at 152-55. The ALJ rejected TPL’s domestic industry showing based upon OnSpec Electronic, Inc.’s expenses under section 337(a)(3)(A)-(C). *Id.* at 155-57. The ALJ found that TPL’s technical prong showing for each patent was insufficient to demonstrate that the alleged domestic industry products actually practice one or more claims of each asserted patent. ID at 134-138. Yet, because the ALJ ruled that such a showing is not required under existing Commission precedent for licensing industries under subsection (a)(3)(C), the ALJ found that TPL showed the existence of a domestic industry in licensing the asserted patents.

The ALJ found that the respondents had not shown that any of the asserted patent claims are invalid. However, the ALJ found that TPL demonstrated infringement only of the ’623 patent, and not the other patents. With respect to the ’623 patent, the ALJ found that TPL demonstrated direct infringement of the asserted apparatus claims (claims 1-4 and 9-12).¹ Accordingly, the ALJ found a violation of section 337 only as to the ’623 patent. TPL asserted the ’623 patent against only a subset of respondents (“the ’623 respondents”), specifically Acer, Inc. (“Acer”); Kingston Technology Co., Inc. (“Kingston”); Newegg, Inc.; and Rosewill Inc. (collectively, “Newegg/Rosewill”). Thus, the ALJ found no violation of section 337 as to the remaining respondents (“the non-’623 respondents”), specifically Canon, Inc.; Hewlett-Packard Co. (“HP”); HiTi Digital, Inc. (“HiTi”); and Seiko Epson Corporation (“Seiko Epson”).

¹ The ALJ also found that method claims 17-19 of the ’623 patent were not infringed. The Commission does not reach those claims, which TPL concedes are no longer within the scope of the investigation, TPL Br. 12 n.3. The Commission vacates the ALJ’s findings with respect to those claims.

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On August 19, 2013, the parties filed petitions for review.² TPL's petition challenged the ALJ's noninfringement determinations for the '443, '424, and '847 patents ("the mapping patents"). TPL did not petition for review of the ALJ's noninfringement determination for the '549 patent. The respondents filed a petition for review, in which the '623 respondents challenged one of the ALJ's claim constructions, and independently challenged the ALJ's finding that the asserted claims of the '623 patent are not anticipated by, or obvious in view of, certain prior art. The '623 respondents also challenged the ALJ's finding that TPL demonstrated the existence of a domestic industry.

The non-'623 respondents contingently challenged the ALJ's determinations. They challenged the ALJ's domestic industry determination on the basis that "[t]here is no evidence that TPL's licensees' efforts relate to 'an article protected by' any of the asserted patents." Resp'ts Pet. 42, 54-56. The petition relies on the Federal Circuit's decision in *InterDigital Communications, LLC v. ITC*, 707 F.3d 1295 (Fed. Cir. 2013), the Court's decision denying rehearing in the appeal from Commission Investigation No. 337-TA-613, *Certain 3G Mobile Handsets and Components Thereof*. These respondents also challenged the ALJ's findings under the economic prong of the domestic industry requirement based on TPL's evidence of expenditures, as well as the nexus between those expenditures and the asserted patents.

² Complainant Technology Properties Limited LLC's Petition for Review of the Initial Determination (Aug. 19, 2013) ("TPL Pet."); Respondents Acer, Inc., Kingston Technology Company, Inc., Newegg, Inc. and Rosewill Inc.'s Petition for Review of Initial Determination Finding a Violation Based on U.S. Patent No. 6,976,623 and Respondents' Conditional Petition for Review of Initial Determination of Finding of Validity and Domestic Industry of the Remaining Patents in Suit (Aug. 19, 2013) ("Resp'ts Pet."); Contingent Petition for Review of Respondent Hewlett-Packard Company Relating to Domestic Industry (Aug. 19, 2013) ("HP Pet.").

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The non-'623 respondents also argued that the four no-violation patents are invalid as anticipated or obvious in view of the prior art, and made additional non-infringement arguments for the three mapping patents, which were raised in TPL's petition.

Respondent HP filed a short petition for review on its own behalf. HP argued for a narrow interpretation of the domestic industry requirement, not only in which "articles protected by" the patent must be found to exist, but in which "protected by" has a narrow meaning:

"The articles protected by" the asserted IP are those which came to market, or are coming to market, under the protective umbrella of the asserted IP, which these articles commercialize. Articles independently created, and then taxed by a patent owner, such as TPL, are not "protected by" the IP by any reasonable interpretation of that word, and thus fail to satisfy the plain language of the statute.

HP Pet. 5.

On August 27, 2013, the parties filed responses to each other's petitions.³ In response to the domestic industry challenge lodged by the respondents collectively, TPL argued that the respondents confuse the technical prong with the economic prong and that there is no technical prong requirement for licensing under section 337(a)(3)(C). TPL Reply Pet. 28. In a short reply to HP's petition, TPL argues that HP never raised its theory of domestic industry below, making it waived, and that, in any event, HP's petition failed to satisfy Commission rule 210.43, because HP failed to explain the basis for its petition under Rule

³ Complainant Technology Properties Limited LLC's Response to Respondents Acer, Inc., Kingston Technology Company, Inc., Newegg, Inc., and Rosewill Inc.'s Petition for Review of Initial Determination Finding a Violation Based on U.S. Patent No. 6,976,623 and Response to Respondents' Conditional Petition for Review of Initial Determination of Finding of Validity and Domestic Industry of the Remaining Patents in Suit (Aug. 27, 2013) ("TPL Reply Pet."); Complainant Technology Properties Limited LLC's Response to Respondent Hewlett-Packard Company's Contingent Petition for Review Relating to Domestic Industry (Aug. 27, 2013); Respondents' Response to Complainant Technology Properties Limited, LLC's Petition for Review of the Initial Determination (Aug. 27, 2013) ("Resp'ts Reply Pet.")

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210.43(b)(1) (factual findings “clearly erroneous,” legal conclusions “erroneous,” or that “the determination is one affecting Commission policy”).

The Commission determined to review the ID in its entirety. The Commission notice solicited briefing from the parties on remedy, the public interest, and bonding, as well as on five specific questions:

1. Discuss, in light of the statutory language, legislative history, the Commission’s prior decisions, and relevant court decisions, including *InterDigital Communications, LLC v. ITC*, 690 F.3d 1318 (Fed. Cir. 2012), 707 F.3d 1295 (Fed. Cir. 2013) and *Microsoft Corp. v. ITC*, Nos. 2012-1445 & -1535, 2013 WL 5479876 (Fed. Cir. Oct. 3, 2013), whether establishing a domestic industry based on licensing under 19 U.S.C. § 1337(a)(3)(C) requires proof of “articles protected by the patent” (*i.e.*, a technical prong). If so, please identify and describe the evidence in the record that establishes articles protected by the asserted patents.
2. Discuss the construction of “accessible in parallel” in view of the prosecution history of the ’623 patent (including the Examiner’s Statement of Reasons for Allowance, *see Salazar v. Proctor & Gamble Co.*, 414 F.3d 1342, 1347 (Fed. Cir. 2005)), and whether the asserted patent claims are infringed and not invalid based upon that construction. Invalidity arguments not dependent on that claim construction should not be briefed.
3. Comment on whether the respondents’ invalidity evidence and analysis as to the Pro II system, the Uno Mas article, the Kaneshiro patent, and the ’928 Publication, and TPL’s evidence and analysis as to the technical prong of the domestic industry requirement, were undisputed. Please cite all evidence in the record that supports your position.
4. Discuss whether TPL demonstrated that the products accused of infringing the ’443, ’424, and ’847 patents receive or interface with SD cards that operate in a four-bit-bus mode, and if so, whether the accused products infringe the asserted claims.
5. If the Commission were to find that the accused products infringe the ’443, ’424, and ’847 patents, discuss whether the SD specification invalidates the asserted claims of those patents.

Notice (October 24, 2013). The notice also solicited briefing from the public on remedy and the public interest.

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On November 7, 2013, the parties filed opening submissions in response to the above-listed questions,⁴ as well as separate submissions on remedy the public interest, and bonding. That same day, non-party Intel Corp. filed comments on remedy and the public interest, supportive of the respondents. On November 15, 2013, the parties replied to each other's submissions.⁵ On December 11, 2013, TPL and Acer filed a joint motion to terminate the investigation as to Acer on the basis of a settlement agreement, which we granted in our notice terminating the investigation.

II. DISCUSSION

The respondents' petition for review and their subsequent briefing present a substantial domestic industry question, specifically, whether TPL, in alleging the existence of a domestic industry under section 337(a)(3)(C), must demonstrate the existence of articles practicing the asserted patents.⁶ We first address the patent issues in this investigation before turning to domestic industry.

⁴ Complainant Technology Properties Limited LLC's Response to the Notice of Commission Determination to Review in the Entirety a Final Initial Determination Finding a Violation of Section 337 (Nov. 7, 2013) ("TPL Br."); Respondents' Written Submission Addressing Certain Issues Enumerated in the Notice of Commission Determination to Review in the Entirety a Final Initial Determination Finding a Violation of Section 337 (Nov. 7, 2013) ("Resp'ts Br.").

⁵ Complainant Technology Properties Limited LLC's Reply Submission to the Notice of Commission Determination to Review in the Entirety a Final Initial Determination Finding a Violation of Section 337 (Nov. 15, 2013) ("TPL Reply Br."); Reply of Respondents to the Submission of Complainant on Review of the Final Initial Determination (Nov. 15, 2013) ("Resp'ts Reply Br.").

⁶ Commissioner Aranoff dissents from the Commission's determination that a complainant is required to demonstrate the existence of articles practicing the asserted patents in order to show a domestic industry based on licensing under section 337(a)(3)(C). She does not reach the question of whether there is a statutory requirement that a complainant demonstrate the existence of articles practicing the asserted patents for engineering and research and development industries under section 337(a)(3)(C). She otherwise joins the Commission's analysis to the extent that it is not inconsistent with her dissenting views.

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The '623 patent is directed toward a device into which several types of memory cards can be plugged at the same time, the memory cards being “accessible in parallel to transfer data from the” first card to the second card. '623 patent claims 1, 9; *accord* claim 17. The accused products, after accounting for respondent Acer's recent termination from the investigation, are memory card readers distributed by Kingston and Newegg/Rosewill. ID at 24-25. TPL asserted independent claims 1, 9, and 17 and dependent claims 2-4, 10-12, and 18-19. ID at 12. For domestic industry, TPL relied upon claim 1. ID at 137.

As noted earlier, the ALJ found a violation of section 337 as to the '623 patent. The principal dispositive issue regarding this patent is whether the patentee's amendments to the claims, and explanations of those amendments, constitute disavowal as to patent scope with regard to what is meant by “accessible in parallel.” The ALJ concluded that there was no disavowal and found that the accused products infringe the claims. The ALJ then found that the respondents failed to demonstrate that the asserted claims are invalid.

1. Claim Construction and Infringement: “Accessible in Parallel”

The ALJ's finding of infringement was based on his claim construction of “accessible in parallel to transfer data” from one type of memory card to another. '623 patent claims 1, 9. Under guiding case law, the words of a claim are usually afforded their “ordinary and customary meaning as understood by a person of ordinary skill in the art when read in the context of the specification and prosecution history.” *Thorner v. Sony Computer Entm't Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012). An exception to this canon of construction applies “when the patentee disavows the full scope of a claim term either in the specification or during prosecution.” *Id.* Throughout proceedings, the respondents argued that, based

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upon prosecution history disavowal, “accessible in parallel” requires that the claimed system be able to read from one type of memory card while writing to the other.

a) Recitation of the File History

Claim 1, which is illustrative, issued from application claim 1, which called, *inter alia*, for “a plurality of memory card interfaces accessible in parallel.”⁷ The patent examiner rejected all of the application claims over a prior art patent application to Pua (U.S. 2002/0178307). Office Action (Aug. 22, 2003). Pua disclosed a memory card reader for connecting different types of memory cards to a computer. Pua contains a “memory card switching circuit” for controlling which memory card to access at any time. Pua ¶ 32.

In response to this rejection, the applicants explained (without amendment in this regard):

Claim 1 requires a “memory card interface apparatus comprising a plurality of memory card interfaces . . . the plurality of memory card interfaces accessible in parallel.” (*emphasis added*). In contrast, Pua does not teach or suggest that the multiple card adapter 10 can provide parallel access to the interfaces 30. Rather, Pua merely teaches a multiple memory card adapter that provides an interface for various types of memory cards. Nowhere does Pua teach or suggest that these interfaces are accessible in parallel.

Amendment at 9 (Dec. 9, 2003) (emphasis in original).

The examiner rejected the claims again:

In response to applicant’s argument that Pua et al does not teach or suggest that the multiple card adapter 10 can provide parallel access to the interfaces 30 . . . , in Pua et al the interfaces 30 are accessible in parallel in that they are connected to the memory card control interface 20 in parallel. The memory card control interface 20 includes a memory card switching circuit for managing data and command flow to the memory cards, and switches between card

⁷ Asserted independent claims 9 and 17 of the ’623 patent issued from application claims 10 and 19, respectively. As claim 17 is no longer at issue, we do not address it further, though throughout the prosecution history, the amendments to issued claims 1, 9, and 17 were consistent and indistinguishable.

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interfaces depending on which type of card is being accessed (see paragraphs 32, 37, and 38). Since the memory card control interface 20 is capable of accessing specific interfaces 30, the interfaces 30 are connected to the memory card control interface 20 in parallel. If the interfaces 30 were connected to the memory card control interface 20 in serial, the memory card control interface 20 would have to access one interface type . . . while sending control signals through at least one second interface type Thus, it is clear that the interfaces 30 are connected to the memory card control interface 20 in parallel. Therefore, the teachings of Pua et al meet the claimed limitation that the interfaces are accessible in parallel.

Final Office Action at 3 (Mar. 5, 2004).

In attempting to overcome the rejection, the applicants amended the claims from “accessible in parallel” to “being accessible in parallel” (application claims 1 and 10), and explained:

The above-emphasized limitation of claim 1 requires that the plurality of memory card interfaces be accessible in parallel. The Examiner’s above-quoted argument merely shows that the interface 30 for each type of memory card is connected to the memory card control interface 20 in parallel. However, the fact that the interface 30 for each type of memory card is connected in parallel does not mean that access to the interfaces 30 occurs in parallel.

In fact, Pua describes that the memory card control interface 20 comprises a memory card switching circuit which is switched to one of the interfaces 30 under control of a microprocessor. For example, in paragraph 32, Pua states, “If, for example, the host reads from or writes to a Compact Flash card, the microprocessor will switch this circuit to the Compact Flash interface. If, for example, the host reads from or to a Smart Media card, the microprocessor will switch this circuit to the Smart Media interface.” Thus, in other words, depending on the type of card being written to or read from, the microprocessor switches the memory card switching circuit to the interface that supports the card being written to or from. Since the memory card switching circuit is switched between interfaces, it follows that no more than one interface can be operative at a given point in time. Thus, access to the interfaces does not occur in parallel.

Amendment at 7 (Apr. 29, 2004) (emphasis in original).

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In his next rejection, instead of relying solely on the Pua application, the examiner relied for anticipation on U.S. Patent No. 6,381,513 to Takase.⁸ Office Action (May 27, 2004). That patent discloses a computer terminal that accommodates several memory cards at once. Takase explains that its “memory card interface **223** can simultaneously accept a plurality of memory cards **1** so that it can read, erase and write the data in parallel.” Takase patent col. 13 lines 9-12.

In response to this rejection, the applicants amended application claim 1 as follows, with similar amendments to application claim 10:

1. **(Currently Amended) A memory card interface apparatus comprising:**
a plurality of memory card interfaces, with at least a subset of the plurality of memory card interfaces configured being selectively operable to interface with a plurality of memory cards of a first type, the plurality of memory card interfaces accessible in parallel.

Amendments (June 16, 2004). The applicants explained that the memory card system of Takase was “not subject to selection.” *Id.* at 6-7; *see* Takase patent col. 14 line 34 – col. 15 line 18. The examiner disagreed, and again rejected the claims as anticipated by Takase. Office Action 15 (Sept. 2, 2004).

The applicants amended the claims again, with the amendments to claim 1 shown below:

⁸ The examiner also found the claims obvious in view of Takase and Pua together.

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1. (Currently Amended) A memory card interface apparatus comprising:

a plurality of memory card interfaces, ~~with at least a subset of the plurality of memory card interfaces being selectively operable to interface with a plurality of memory cards of a first type comprising a first subset to interface with a memory card of a first type and a second subset to interface with a memory card of a second type, wherein the memory card of the first type and the memory card of the second type are accessible in parallel.~~

Amendment (Nov. 22, 2004). The applicants explained:

Takase describes a system in which a plurality of memory cards of the same type may be accessed in parallel. For example, see columns 15 and 16. However, Takase fails to teach or suggest that a memory card of the first type and a memory card of a second type may be accessed in parallel.

Pua (US 2002/0178307) describes a system which provides serial access to a number of memory cards of different types (see paragraph 37, column 2). However, Pua does not teach or suggest that a memory card of a first type and a memory card of a second type may be accessible in parallel.

Thus, the combination of Takase and Pua would provide a system in which there would be parallel access for memory cards of the same type, and serial access for memory cards of different types. The combination of Takase and Pua would still fail to teach or suggest that a memory card of the first type and a memory card of the second type may be access [sic] in parallel, as recited in claim 1.

Id. at 5 (emphasis in original).

Another rejection followed, this time relying on the combination of Takase and Pua, as opposed to each individually. Office Action (Feb. 5, 2005). The examiner argued that a person of ordinary skill would have been motivated to combine the two references “in order to provide the ability to interface with a plurality of memory cards as desired/required by users, thereby increasing the versatility and appeal of the system to a greater number of users.” *Id.* at 9.

In response to this rejection, the applicants amended the claims again: